



reactions in order to judge whether their gains in strength have so inhibited the U.S. as to widen the scope of action which they can undertake without substantial risk of war. But the depth and vigor of their probing will depend more upon their estimate of U.S. reactions than on their calculations of relative military strength. Accordingly, they will not, in our view, automatically conclude that actions which were heretofore too risky have now become tolerably safe. It is also important to note that the calculations of relative military strength and Western reactions to probes are only part of a host of factors which will affect Soviet decisions.

5. It is clear that the Soviet successes with *sputniks* [satellites] and ICBM tests in 1957-1958 had much to do with inspiring the confidence which led the USSR to open its challenge on the Berlin question in November 1958. Beyond this general observation, we find no precise relationship in timing between the USSR's Berlin tactics and the progress of its buildup in strategic forces. In particular, the quickening of the tempo of the ICBM program in 1961 seems unlikely to have resulted from any new decisions regarding Berlin. It reflects development and deployment decisions taken several years previously. The fairly regular buildup of intercontinental forces of all kinds projected in the estimate for the next year or so does *not* suggest that Soviet efforts are concentrated toward reaching some particular force level at any particular time or in relation to any particular situation, e.g., Berlin.
6. The Soviet forces now estimated for the period 1962-1967 are of a size and character which remain within the parameters used last fall in developing our own recommended strategic force mix (force levels and weapons systems) for this period.
[Deletion for security—17 lines of text and 3 lines of footnote, dealing with technical military and intelligence data]
7. Among the other changes forecast in recent national estimates are the growing submarine-launched missile threat, the rapid Soviet development of an anti-ballistic missile program, larger MRBM-IRBM forces than previously estimated, the possibility of Soviet weapons in space, and the intensifying problem of civil defense.
8. [Deletion of para. 8, 15 lines, on U.S. policy]
9. The general implication of the Soviet military posture and the strategy which it supports would appear to be that the Soviets hope to confront us with continuing political pressure, subversion and various forms of unconventional warfare under the umbrella of their growing strategic power. At the same time, they would hope to capitalize on their conventional military power by the implicit threat of bringing it to bear in situations where they have a local conventional superiority. The broad conclusion to be drawn for our defense policy is to reaffirm the importance of shaping our military posture so as to provide credible military options over a wide spectrum of contingencies from general war at one end to local wars and minor aggressions at the other. It is also important to reaffirm that our own

strategic forces must provide a corresponding umbrella under which we may meet Soviet confrontation on lesser scales than general war.

10. We judge the greatest hazard to be in the Soviet calculation (or miscalculation) of the risks of particular courses of action as Soviet military capabilities grow. A dangerous change in the calculus of risks would of course be most likely if the Soviets thought they had obtained a temporary military superiority, especially in the field of AICBMs, whether or not we shared that estimate. The current estimates of future Soviet military strength, and current US defense programs, do not lead us to expect such a situation. Nonetheless, it should be a basic task of the United States, if possible, to see to it that this military advantage does not occur and to this end to give the highest priority to the established defense programs of the United States and to continue and, if possible, to increase the effectiveness of our intelligence collection systems, and to conduct effective informational programs to blunt Soviet efforts to exploit politically real or alleged Soviet military advances, such as an anti-missile capability.

(s) Dean Rusk

Secretary of State

(s) John A. McCone

Director of Central Intelligence

(s) Robert S. McNamara

Secretary of Defense

(s) Lyman L. Lemnitzer

Chairman, Joint Chiefs of Staff

Attachment.

- (1) Report of the Special Inter-Departmental Committee on Implications of NIE 11-8-62 and Related Intelligence

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**REPORT OF THE SPECIAL INTER-DEPARTMENTAL COMMITTEE
ON
IMPLICATIONS OF NIE 11-8-62 AND RELATED INTELLIGENCE**

I. IMPLICATIONS CLARIFYING SOVIET POLICY

1. The evolution of Soviet strategic forces described in NIE 11-8-62, "Soviet Capabilities for Long Range Attack," dated 6 July 1962, reflects in the first instance the USSR's desire to overcome the advantage which the US has enjoyed in this vital ingredient of the power equation. The Soviet weapons programs are obviously aimed at obtaining greater security for the Bloc and greater freedom for Soviet policy in the face of the immense threat posed by US strategic power. Within the last year, with the availability of a more suitable second-generation missile, a rapidly unfolding deployment program has carried the Soviets farther toward these aims.

[Deletion of footnote, 8 lines, reference to U.S. intelligence reports]

Soviet View of the Risks of War

2. It is clear, from the trends in Soviet strategic capabilities estimated in NIE 11-8-62, that the Soviet leaders have considered that they can continue to pursue their present political policy, while simultaneously avoiding courses of action involving high risk of general war. If they had not, they would surely have provided themselves with much stronger forces than they now have and would be embarked on a much steeper buildup. Instead, they are building strategic forces at a pace which, while a substantial burden on an already strained economy, is well below their maximum potential. This in turn implies that they intend to pursue courses of action which, in their view, will keep the risks of war under control. It does not assure, however, that they will always estimate these risks correctly.

Effect on the Soviet Outlook

3. While intending to avoid war, the Soviets expect their growing strategic strength to lend increasing weight to their foreign policies. On a general level, growing strategic capabilities will strengthen the Soviet leaders' belief in their ability to influence the course of events in all areas of the world. Their sense of the USSR's political weight, its "right" to a voice in all international questions, is closely linked to their appraisal of relative military power. As the gap has grown between their own military strength and that of all other countries save the US, they have increasingly insisted upon their great-power prerogatives and have injected their demands into all sorts of world issues. This attitude has

encouraged them to pursue more forward courses of action in remote areas, for example, southeast Asia. The growing capabilities estimated in NIE 11-8-62 will nourish this tendency.

4. In particular issues involving a direct clash of Soviet-American interests, however, more acute considerations of military risk figure in Soviet calculations. The Soviets know the magnitude of Western military strength. We believe that their appraisals of the implications of that strength are realistic. We also think it certain that the USSR has come to appreciate US intelligence capabilities and now credits the US with a fairly accurate estimate of Soviet long-range striking power. At present, the Soviets estimate that each side could inflict great damage on the other, despite their respective defensive capabilities, and they believe that the US makes the same estimate. They realize, however, that the US still has a greater capability to damage Soviet territory than they do to damage US territory. Unless some highly effective antimissile system alters the strategic balance, or some unforeseen breakthrough in offensive weapons occurs, we believe that they will continue to hold this judgment.*

Uses of the Soviet Deterrent

5. The Soviets hope—indeed they think it all but inevitable—that their growing intercontinental striking power, together with their air defense posture, will so inhibit US policy as to widen the scope of actions which they can undertake without substantial risk of war. During most of the 1950's, the Soviet deterrent consisted mainly of the threat of ground and air attack, and more recently MRBMs, against Western Europe. The Soviets evidently regarded this form of deterrence as insufficient because it could not be applied directly against the US, and their foreign policies reflected a cautious approach to the calculation of risks of war.

6. During the same period, however, they were vigorously pursuing the development of new and more effective systems for attacking the US and for protecting themselves against US attack. They evidently believed that the ICBM, by posing a direct threat to the US homeland, would radically increase the force of their deterrent and thus permit them to undertake bolder advances with no increase of risk. By late 1958, they concluded that their ICBM claims, borrowing credibility from their sputnik demonstrations, had begun to achieve this result. At this point, a decade after the Berlin blockade, they felt themselves able to resume the exploitation of the West's geographic vulnerability in Berlin.

7. Nearly four years have elapsed, and during this time the Soviet leaders' expectations have sobered. They have acquired a keener appreciation of the difficulties of translating gains in military power into tangible political advances. During much of the period, they had reason to believe that the US was overestimating their ICBM force. Even so, they evidently did not consider that the West was so deterred that they could safely undertake unilateral moves against its vital interests in Berlin.

* The Soviet antimissile effort enjoys a very high priority, and the USSR is almost certain to deploy an antimissile system—of unknown effectiveness—before the US does. A propaganda campaign is already underway to persuade the world of a marked Soviet advantage in this field.

Future Uses of the Deterrent

8. NIE 11-8-62 makes it clear, however, that during 1958 and 1959 the USSR in fact had no ICBM capability, and that even in 1960 and 1961 this capability was quite small. But in 1962 the second generation ICBM is being deployed at operational sites, and the USSR almost certainly knows that the US knows, not only of the deployment, but also the actual location of the sites. The Soviets previously were willing to act only with caution on the basis of a capability which they knew existed mainly in their opponents' minds, but their appraisal of risks may change now that their capability has become real and is growing.

9. We recognize this possibility and its hazards for the period ahead. We nevertheless regard it as likely that the Soviets will not abandon caution in Soviet-American confrontations, including Berlin. We believe they recognize that there are severe limits to the challenges which can be posed with weapons which the challenger is as concerned as the opponent to avoid using. As before, when their inflated ICBM claims had won considerable acceptance, they will again seek to persuade the West of their determination to advance. They will believe that the US ought to draw the conclusion that, under these circumstances, it can no longer maintain its exposed positions. They will almost certainly test Western, and particularly American, reactions in order to judge whether their gains in strength have had this effect. But the depth and vigor of their probing will depend more upon their estimate of US reactions than on their calculations of relative military strength. Accordingly they will not, in our view, automatically conclude that actions which were heretofore too risky have now become tolerably safe.

10. It is also important to note that the calculations of relative military strength and Western reactions to probes are only part of a host of factors which will [a]ffect Soviet decisions. The movement of politics within the USSR, the course of intra-Bloc relations, and the nature of opportunities for expansion which arise in the Free World will be fully as important in determining the shape of Soviet foreign policy.

The Question of Timing

11. It is clear that the Soviet successes with sputniks and ICBM tests in 1957-1958 had much to do with inspiring the confidence which led the USSR to open its challenge on the Berlin question in November 1958. Beyond this general observation, we find no precise relationship in timing between the USSR's Berlin tactics and the progress of its buildup in strategic forces. In particular, the quickening of the tempo of the ICBM program in 1961 seems unlikely to have resulted from any decisions regarding Berlin. It reflects development and deployment decisions taken several years previously. The fairly regular buildup of intercontinental forces projected in the estimate for the next year or so does not suggest that Soviet efforts are concentrated toward reaching some particular force level at any particular time or in relation to any particular situation, e.g. Berlin.

Secrecy

12. One additional implication deserves attention. The Soviet long-range forces estimated in NIE 11-8-62 for the next few years are neither as large nor as

well protected as corresponding US forces. In these circumstances, we believe that the Soviet leaders will continue to think it highly important to make it as difficult as possible for the US to acquire targeting information. This in turn implies that they are unlikely to ease their basic attitude toward inspection of arms control agreements. It also indicates that they will continue to attach a very high priority to the countering of Western reconnaissance.

II. IMPLICATIONS FOR US DEFENSE POLICY

Specific Implications

1. We have examined the implications for our defense policy of changes in the Soviet military posture over the next five years, as projected in NIE 11-8-62. [Deletion, 1 line, reference to a U.S. intelligence report]

Among the changes forecast are several potentially significant developments on which some new light has been shed since earlier estimates, such as:

- a. A growing sub-launched missile threat.
- b. A large-yield weapon threat.
- c. Hardening of ICBM sites.
- d. Missile readiness and re-load capability.
- e. Anti-ballistic missile capability.
- f. Larger MRBM/IRBM forces than previously estimated.

2. These developments represent problem areas which require close attention and review of certain US programs. We can, however, tentatively conclude from our examination of estimated changes in the Soviet military posture that these changes, in themselves, presently call for no major alterations in the US strategic retaliatory force structure which was recommended to you by the Department of Defense on 23 September 1961. A fuller basis for judging the validity of this conclusion will be provided by an intensive study of strategic force requirements now being conducted by the JCS, and scheduled for completion 1 October 1962. The most immediate effect of Soviet developments is likely to be on our research and development programs in areas associated with such matters as large yield weapons effects, penetration aids, and satellite survivability. Our present examination also reaffirms the continuing need to press ahead with programs we have laid out in other fields, including civil defense, air defense, and general purpose forces.

3. The Soviet forces now estimated for the period 1962-1967 are of a size and character which remain within the parameters used last fall in developing our own recommended strategic force mix (force levels and weapons systems) for this period. Soviet ICBM forces in particular, are estimated for the period to be approximately of the size previously forecast in our intelligence estimates, and they remain substantially less than in the assumed high and median Soviet postures used by DOD in developing our recommended forces last fall. [See table 1.] [Deletion of a footnote reference, 2 lines] The new estimates indicate that a hardening program may be proceeding somewhat sooner than previously anticipated, but again the total number of hardened sites forecast for the period is still well below our planning assumption figures for 1965 and 1967.

[Deletion of 7 lines on technical and scientific data and intelligence]

4. [Deletion of para. 4, 14 lines, on U.S. policy]

5. Our present and previous analyses recognize that even in the most favorable case with restraints in targeting on both sides, civil casualties in the United States and Western Europe could be on the order of ten million each, while without restraints during the 1962-67 period, under many circumstances of war outbreak, they could be on the order of 100 million or more each. As time passes the Soviet potential for doing civil damage to the West will grow; the incentive to actually carry out such attack may, however, diminish.

6. The new estimates of Soviet posture do not lead us to alter our basic assessment that during this time period we retain a relatively strong military posture in the event of nuclear war, but that the potential civil damage implications are progressively more unfavorable with the passage of time. The latter, of course, applies to both sides, so that the prospect of real victors emerging from any major nuclear war diminishes further.

7. In addition to the problem areas given prominence by our latest estimates of Soviet long-range striking forces for the 1962-67 period, there are several areas of potential significance which merit attention. [Deletion of footnote, 7 lines, with source references] The most important of these are:

- a. The prospect of Soviet anti-satellite activity.
- b. The possibility of Soviet weapons in space.
- c. The problem of making clear to Soviets advantages of non-civil targeting.
- d. The problem of civil defense.

8. The rapid Soviet development and initiation of deployment of anti-ballistic missile systems requires the U.S. to counter Soviet political and propaganda exploitation of their anti-missile program. Preparation for this contingency should include active informational programs on our own progress and on military limitations on Soviet progress. Decisions on our own anti-missile program should also be urgently reconsidered with due weight given to the political considerations.

General Implications

9. It is our view, after examination of the Soviet military posture in light of our most recent intelligence estimates, that the Soviets are pursuing an essentially deterrent military strategy in which their military forces are designed to:

- a. Support an aggressive political-subversive strategy;
- b. Deter the West from military action, particularly from initiation of a first strike with nuclear forces;
- c. Afford the option of conducting partially blunting pre-emptive strikes and retaliatory operations against us in the event mutual strategic deterrence breaks down and a major war should occur.

10. Our intelligence estimates indicate an increase in the number of Soviet forces capable of hitting directly at the United States in the 1962-67 period, as well as a general trend of larger warhead yields deliverable by these forces. However, the relative US-USSR military postures during the period do not significantly improve Soviet chances of launching a disarming nuclear strike against us. During this period, the Soviet military posture shows some improvement in surviving nuclear military forces following an initial nuclear exchange,

but the Soviet Union would still be left in a militarily inferior position relative to the US under almost all circumstances of war outbreak.* The Soviet military posture also increases the Soviet ability to inflict civil damage, already great for most war outbreak situations.

11. The general implication of the Soviet military posture and the strategy which it supports would appear to be that the Soviets hope to confront us with continuing political pressure, subversion and various forms of unconventional warfare under the umbrella of their growing strategic power. At the same time, they would hope to capitalize on their conventional military power by the implicit threat of bringing it to bear in situations where they have a local conventional superiority. Thus—barring successful effort on our part to create additional options—such a strategy could, at worst, leave open to us the unpalatable choice of a first strike or swallowing our losses in a series of confrontations at local pressure points around the periphery of the Soviet Bloc. Increased Soviet ability to put direct pressure on the United States (through the threat of larger forces capable of hitting the US) would also open us to added Soviet efforts to separate us from our Allies, and to create divisions among them.

12. The broad conclusion to be drawn for our defense policy is to reaffirm the importance of shaping our military posture so as to provide credible military options over a wide spectrum of contingencies from nuclear war at one end to local wars and minor aggressions at the other. The developments we have considered here, while not of a kind to dictate basic change in our strategy and military posture, do reduce even further the desirability of resort to the high end of the spectrum of nuclear means and consequently increase the importance of developing alternative means of bringing military power to bear around the world.

III. IMPLICATIONS FOR US FOREIGN POLICY

1. The estimates contained in NIE 11-8-62 of Soviet capabilities for long-range attack do not require basic revisions or changes in our foreign policy as a whole. This view is predicated on the expectation that the defense policies outlined in Section II of this study are vigorously and effectively carried out. If these policies are effectively implemented, there is no reason to believe, in the period under review, that the correlation of forces in any significant extent will favor the Soviet Union. We can anticipate the continuance of the tensions, strains, and dangers of the cold war. As Soviet strategic capabilities grow the USSR may well judge that it can press more aggressively toward limited objectives without running serious risks of general war. A more aggressive political action by the Soviet Union is, however, not at all certain, and cannot be predicted at this time. Any such development would depend upon a number of other factors which, at present cannot be foreseen—in particular, their estimate

* The exception would be an out-of-the blue, perfectly executed and coordinated attack on our forces, without our having received any strategic or tactical warning. In this case, US forces surviving might be limited largely to Polaris submarines and carriers at sea, together with airborne alert aircraft and some hardened missiles. This situation could leave neither side with a clear military superiority. For a variety of reasons, this eventuality appears highly improbable.

of relative military strength, and of the Western reactions which they encounter when they try to test the political potency of their strategic strength.

2. We judge the greatest hazard to be in the Soviet calculation (or miscalculation) of the risks of particular courses of action as Soviet military capabilities grow. A dangerous change in the calculus of risks would of course be most likely if the Soviets thought they had obtained a temporary military superiority, especially in the field of AICBMs, whether or not we shared that estimate. In such circumstances, the Soviets might seek to exploit a temporary military advantage before the United States could redress the balance. The current estimates of future Soviet military strength, and current US defense programs, do not lead us to expect such a situation. Nonetheless, it should be a basic task of the United States, if possible, to see to it that this military advantage does not occur and to this end to give the highest priority to the established defense programs of the United States and to continue and, if possible, to increase the effectiveness of our intelligence collection systems, and to conduct effective informational programs to blunt Soviet efforts to exploit politically real or alleged Soviet military advances, such as an anti-missile capability.

3. In general, however, there is nothing in the estimate contained in NIE 11-8-62 which would require any substantive change in our foreign policy.

ANNEX A

SPECIFIC PROBLEM AREAS FOR US DEFENSE POLICY

1. *Soviet Sub-launched Missile Threat*

a. It has long appeared likely that the Soviet Union would follow the United States' lead and develop a submarine missile force of some strength. These forces now appear likely to be larger than was previously estimated. Reasonable figures consistent with the estimates in NIE 11-8-62 are about 90 submarines with some 350 missiles by 1967. This is almost double the numbers forecast a year ago for 1966. (See comparison of estimates and explanatory note in Table 2). It should be noted that the bulk of the increase is accounted for by cruise missiles (30 submarines with 156 missiles by 1967, compared with none in last year's forecast). There is uncertainty both as to the eventual number of these cruise missile subs (which as estimated will include many more nuclear than diesel-powered types), and their intended use—whether they are intended for attack against land targets as well as surface shipping. The latter presently appears to be their more likely major role.

b. Other aspects of the changing composition of the Soviet missile sub force also present difficulties in assessing the potential threat this force poses. On the one hand, there is an increase in the ballistic missile threat (about 60 submarines in 1967 compared with 48 submarines previously forecast for 1966), and a greater number of nuclear-powered submarines (about 50, compared with 24 submarines previously), which will increase the potential for protracted stationing of these forces at sea. Also, there are strong indications that the Soviets are developing a submerged ballistic missile launch capability. With missiles of ranges estimated at 650 or 2,000 miles, these submarines could increase the difficulties of our

ASW task when the Soviets have developed [deployed] them on an operational scale. On the other hand, while the Soviets are actively pursuing a submerged launch program, these developments at their present stage indicate that a Polaris-type threat has not yet materialized. Furthermore, the component of the Soviet force which combines nuclear-powered submarines with ballistic missiles shows no appreciable change from what was previously estimated (25-30 submarines in 1967 compared with 24 submarines previously forecast for 1966).

c. Despite the many uncertainties which exist with respect to the potential threat of the Soviet sub-launched missile force, both in terms of weapons and methods of operation, it is apparent that we shall have our work cut out for us in finding ways to deal with this problem. In the future, as the number of nuclear-powered submarines increases, the Soviets may adopt operational practices that would make it very difficult to counter the sub-launched missile threat. In the mid-60's, a portion of the Soviet nuclear-powered submarine missile force will probably be conducting routine patrols within missile range of US targets.

d. There are asymmetries, to be sure, in the ASW prospects of the United States as compared with the Soviets. We have certain advantages in terms of access to the seas, transit distances, the use of advanced bases, the SOSUS detection system, and superior naval technology. [Deletion, 2 lines, on U.S. ASW capabilities] Nevertheless, if the Soviets continue their technical progress, build the numbers of ships estimated, and keep a substantial portion of their force on station with long-range missiles (although probably a much smaller proportion than we will be able to keep on station), we will be presented with problems of great difficulty.

e. Two contrasting cases are of interest in illustrating some of the problems we face. In the first, favorable to us, the Soviet submarine fleet—following current practice—for the most part would not be deployed at war outbreak and virtually none would be in position to launch immediately against the United States. In this case, we could expect our attacks on Soviet naval and submarine bases (some 50 aiming points in the mid 1960's) to kill a large proportion of the missile sub force. The remainder would face further attrition in seeking to reach launch areas. The surviving sub-launched missile threat to the United States in this optimistic case would be minimal in comparison with other Soviet nuclear forces that are likely to survive.

f. In a second and more likely case, much less favorable to us, the Soviet submarine fleet would be largely deployed either on a steady-state basis or during a crisis. The survival to time of launch of the Soviet force would depend, in addition to circumstances of war outbreak, on the effectiveness of our sea surveillance, tracking and sub-killing systems. If the Soviets operate their nuclear submarines very carefully, and especially avoid making much noise, a portion of their force will probably be able to avoid detection while on station within missile range of targets in the United States. [Deletion, 3 lines, on U.S. submarine capabilities] If ordered to fire in a coordinated attack, the Soviet missiles could undoubtedly be launched before the submarines could be destroyed. However, it might be possible through prompt attack to destroy many of the submarines and at least deny the Soviets the prospect of retaining a highly protected reserve force on station.

g. The Soviets might be able on occasion to put enough submarine missiles on station by the mid-1960's to present a threat with virtually no tactical warning to our soft bomber and missile bases (submarine missiles are unlikely to have a combination of yield and accuracy to present a major threat to hardened dispersed sites). However, during such periods of tension, extra ground and airborne alert and dispersal measures can be adopted. Other possibilities are the development of a warning system against sub-launched missiles and a shift of bomber operations from coastal to inland bases.

h. In terms of future effort, it appears that we should continue to exploit our relative advantage in sea-surveillance capabilities. We cannot count with much confidence on being able to blunt a submarine missile attack; we do have the prospect, however, of being able to keep a fairly close watch over the deployment and movements of enemy submarines.

[2.] [Deletion, para. 2 heading on weapons]

a. Within the next few years, the Soviets will probably have limited numbers of large yield weapons [deletion] deliverable by bombers and probably ICBMs. A few bombs of these yields could already be available. These prospects point to a potentially dangerous problem area. [Deletion, para. 2a and all of para 2b, 32 lines, technical data and intelligence]

c. With reservations as to what further study of large-yield weapons effects may indicate, the following implications of possible Soviet employment of such weapons can be drawn from our war gaming and other analyses to date. First, the military outcome in the mid-60's in terms of relative force survival under various circumstances of war outbreak and targeting policies does not appear to be appreciably affected. A major study of United States strategic force requirements now scheduled for completion by 1 October 1962 will, among other things, provide a reassessment of our tentative conclusions on this issue. Second, while a definitive assessment of the direct military advantages of using large yield weapons will depend on factors not yet determinable, such weapons would certainly lend themselves to a Soviet deterrent strategy with strong "terror" overtones. Third, the magnitude of civil damage ensuing as a result of use of large yield weapons would depend heavily on the targeting strategy employed by the Soviets—military, urban-industrial, or mixed. Variations in civil damage from use of high yield weapons are more sensitive to the kind of targeting elected in military attack cases than in urban-industrial or mixed attacks. For example, assuming that 60% of the US population is afforded fall-out protection consistent with our present civil defense goals for the mid-60's, tentative estimates for illustrative cases in this period would be:

(1) If the Soviets should strike first, employing a discriminating military attack (assigning their high yield weapons, ground burst, only against hardened targets, and air-bursting all other weapons), collateral civil damage would bring approximately 20 million United States casualties. If the Soviets strike first, attacking military targets less discriminately; (i.e., ground bursting on all targets), United States casualties could number about 85 million if large yield weapons were used, and 55 million if only smaller yield weapons were used.

(2) For urban-industrial and mixed targeting cases, with a Soviet first strike,

civil damage does not prove greatly sensitive to large yield weapons, where fall-out protection is assumed as above. Civil casualties for the United States would be on the order of 135 million with only lower yield weapons, while the additional employment of large yield weapons would probably increase this casualty level by no more than 10 million.

(3) If the United States were to strike first, with the Soviets receiving little warning, a Soviet retaliatory attack directed against military targets and employing large yield as well as lower yield weapons (all ground burst), would bring about 35 million casualties. If the Soviet retaliatory attack were directed against urban-industrial targets, United States casualties would number around 100 million. For smaller yield weapons only, the casualties for the respective cases would be 20 and 90 million.

[Deletion, para. 3, 42 lines, technical data and intelligence]

4. *Missile Readiness and Refire Capability*

a. Our latest intelligence estimates indicate that the Soviets are working to improve the readiness and reaction times of their medium and long-range missile units, and that they are investing in measures to provide a refire capability. Present Soviet procedures for firing initial and subsequent salvos are relatively slow and complicated, and design limitations of their current missile systems appear to preclude attainment of readiness conditions approaching those of US systems. Nevertheless, some improvement can be expected. These trends, together with the beginning of an ICBM hardening program previously discussed, reflect a Soviet effort to increase the survivability of their missile force. This would have the effect of making it easier for the Soviets to defer decision in any ambiguous situation. It would also place their forces in a somewhat better posture than at present for attempting to carry out preemptive and retaliatory operations.

b. With regard to Soviet refire doctrine and capabilities, several points are worth noting in connection with our planning. In Soviet eyes, the size of their missile force may be regarded not in terms of numbers of launchers, but launchers plus re-fire. (While the evidence is not firm on this point, we believe an average of two missiles is provided per launcher). This could lead the Soviet's to place somewhat greater weight on the potential of their missile force than circumstances may warrant. Our estimates indicate that Soviet time to re-fire is measured in hours (perhaps 10 hours minimum for ICBM's, and about 4 to 6 hours for MRBM's), which means that in fact, under any likely circumstances of war outbreak and with our planned targeting, the bulk of Soviet launchers would not survive for a second round of fire. Soviet re-load capabilities to date are associated with soft sites. It is not clear whether their hardened sites will be adaptable to re-fire. Should the latter prove to be the case, we would, of course, want to insure that hardened sites were not left to deliver further fire. Even if complete destruction of a hardened site should not be attempted, a weapon detonated in the vicinity could render such a site unfit for re-fire for an indefinite period.

c. For our own part, the pros and cons of developing a re-fire capability from our hardened sites have already been weighed, and it has been considered that such a program is not worth undertaking. This conclusion still appears valid.

5. *Soviet Anti-Ballistic Missile Capability*

a. Our examination of this problem area in light of relevant technological factors and the latest intelligence on Soviet anti-missile developments suggests that the military implications of Soviet anti-ballistic missile capabilities in the mid-60's should not be underestimated, even though the military impact is likely to be less immediate than the psychological impact, which could be considerable.

b. In a military context, the advantages enjoyed by offensive delivery systems over defensive systems do not seem likely to be significantly narrowed by ABM developments within the next few years. However, this situation can not be taken for granted without substantial efforts to keep it that way. Our programs for development of multiple warheads and other penetration aids, which have been greatly expanded in the last couple of years, attest to the seriousness which has come to be attached to the problem of assuring that our strategic missile delivery systems will not be seriously degraded by future Soviet ABM capabilities.

c. Our penetration aids programs should probably keep pace with Soviet ABM capabilities foreseeable in the mid-60's. Our first decoy capability (Atlas F) will become available in about a year. Initial decoy capabilities for the A-2 Polaris and Minuteman are scheduled for early 1963 and late 1964 respectively. Our advanced ballistic missile re-entry system research program will provide basic technology from which to design new re-entry systems for any of our projected ballistic missile programs over the longer term. If our present intelligence estimates are borne out, the Soviets are not likely to achieve more than limited deployment of a defensive system against ICBM's in the 1963-66 period. Nevertheless, we face many complex technical problems and, partly owing to our pay-load capacities, some difficult compromises between warhead and penetration packages. Should the Soviets rely on phased array, low frequency radars for their ABM system rather than high frequency radars, and this now seems likely, a considerable amount of our penetration aids work may have to be revised.

d. One factor which should tend to operate to our advantage during the period of the mid-60's, at least, is the probable Soviet intention to give priority to major urban areas in deploying their initial anti-ICBM defenses. While it will be important for us to retain the ability to penetrate ABM-defended urban centers, it would appear that the main task of penetrating to military targets removed from such centers will not be greatly affected. Over a period of time the Soviets are likely to extend the deployment of their ABM defenses, as they did with their SAM [surface-to-air missile] defenses, but the huge expense and time required for a comparable Soviet ABM deployment would seem to allow us room to work out ways of dealing with the situation.

e. Notwithstanding the likely inadequacies of such Soviet ABM systems as can be foreseen for the mid-60's, it should be recognized that Soviet claims and possible demonstrations of a capability in this field could have significant psychological repercussions. Unless forehanded United States counter-programs are carried out, Soviet exploitation of ABM claims could help to establish a public image of Soviet military advantage and erode the confidence of our Allies in United States military superiority.

f. Soviet advances with anti-ballistic missile systems require the U.S. to counter Soviet political and propaganda exploitation of their unfolding anti-missile capability. Preparation for this contingency should include active informational programs on our own progress, and on military limitations on Soviet progress.

g. Soviet advances in development and initiation of deployment of anti-ballistic missile systems also call for continuing review of decisions on our own anti-missile program with due weight given to the political considerations. The U.S. should continue vigorous prosecution of current programs to overcome the technical obstacles to development of militarily useful anti-missile defenses.

6. *Soviet MRBM/IRBM Forces*

a. Our latest intelligence estimates indicate that the Soviets are building a larger MRBM/IRBM force than previously estimated—roughly, to a level of 550–650 launchers in the mid-60's rather than 350–450. The present size of their force, on good evidence, is approximately 500 operational launchers, of which about 90% are deployed against the European area. Some of these launchers may be alternates, not assigned to a first salvo. The increase anticipated for the period of the mid-60's, which amounts in effect to about 50 additional aiming points (200 more launchers, at 4 launchers per aiming point), does not present a major new problem in terms of our own previously recommended force levels.

b. It is estimated, however, that beginning about 1965–67 the Soviets may introduce hardened or mobile MRBM/IRBM systems to provide greater survivability for a portion of their force. Should this occur, some change in our programs for dealing with the MRBM/IRBM threat may be necessary, and we would be well advised to examine factors bearing on this potential problem. Studies now underway in the Department of Defense are taking this problem into account.

c. With respect to the Soviet MRBM/IRBM force as it is presently configured, the larger number of launchers available does not seem to offer any significant advantages to the Soviets under some circumstances of war outbreak. If we strike first, little more of this highly vulnerable force will survive than if it were somewhat smaller. If the Soviets strike first, they already have such weight of attack against Europe that the additional MRBM/IRBM forces seem to make little difference. However, under some intermediate circumstances, the Soviets might consider it important to have the additional assurance of a larger missile force posed against Europe. The pattern of deployment of this force also shows that the Soviets count on it, particularly on its IRBM elements, to insure neutralization of United States overseas bases and installations outside the immediate area of Western Europe. This is another factor which may seem to them to justify some redundancy with respect to this force.

d. European reaction to the estimate of a larger Soviet MRBM threat is a factor to be considered. Our frank handling of earlier estimates of this threat and reaffirmation of our commitments through such means as our actions on Berlin, seem to have prevented acute anxiety on the part of the Europeans. The new larger estimate could give rise to concern, however, and therefore suggests the desirability of continuing our program of frankness, more detailed discussion of

nuclear matters, and meaningful reassurance—through our actions—on the extent and firmness of our commitment.

7. *Soviet Anti-Satellite Capability*

[Deletion, 30 lines, technical data and intelligence, and possible U.S. counter-actions]

8. *Possibility of Soviet Weapons in Space*

[Deletion, 24 lines, technical data and political-psychological implications]

9. *Problem of Making Clear to Soviets Advantages of Non-Civil Targeting*

a. One important element in the development of our own strategy has been to include in our plans the option of using restraint to the extent that circumstances warrant in civil targeting. Corollary to this has been the attempt to design our forces and provide options for their use so as to exert pressures on the Soviets to minimize civil targeting in the event of nuclear conflict. As to be expected, there has been conspicuous Soviet refusal (exemplified by Khrushchev's recent utterances on this subject) to take a public line responsive to a civil damage-limiting concept. What we know of private Soviet discourse on the subject, as reflected in NIE 11-8-62, does not indicate that the Soviets have given much thought to minimizing civil damage in a strategic exchange. Clearly, we cannot count on the Soviet Union using restraint in its targeting policies, even in self-interest. Nevertheless, the stakes involved would seem to warrant continued effort to influence the Soviets in this direction. In this connection, planning on our side to ensure a protected reserve force which could be used in a controlled and deliberate way to threaten Soviet cities or remaining military forces after any initial counter-force strikes would appear to be among the more persuasive "educational" tools at our disposal. Our presently recommended forces and the targeting options they permit can fulfill this function.

b. It is also worth noting that two developments in the Soviet military posture—missile hardening and nuclear subs—give the Soviets the possibility of having a protected force of their own. With a protected force they would be in a better position to go along with a policy of restraint and damage-limiting targeting, providing they can be brought to recognize its advantages.

10. *Civil Defense Problem*

a. Soviet capabilities—as now projected through the mid-60's in submarine launched missiles, in ICBM's and in large-yield weapons—confirm the urgency of the civil defense problem, but do not change the basic objectives of our program. As currently developed, this program calls for protection of the population from the fallout threat. It offers no guarantee against the blast effects of a potential attack. In the mid-range period, this shelter program would be very effective in saving lives in case of attacks primarily against military targets. (See page 5 [of annex A, original pagination], paragraphs 2c (1) and (3)). If attacks were launched against large urban-industrial areas, there would be very large numbers of fatalities in any event, although fallout shelters would make a significant difference. The currently projected program (about two-thirds complete in the mid-60's) would reduce total US casualties, under a Soviet first strike, approximately on the following order in several illustrative cases:

<i>Targeting</i>	<i>Without Shelter Program (Million Casualties)</i>	<i>With Shelter Program</i>
Lower Yield Weapons Only		
Urban-Industrial	165	135
Military	95	55
Combination High & Lower Yield Weapons		
Urban-Industrial	175	145
Military	135	85

b. The potential thermal threat of large-yield weapons might change the degree of protection currently established for the civil defense program. However, more data are required as to the magnitude of the thermal threat, fire spread, and the likelihood of the employment of very large yield weapons in the high-altitude thermal mode. More variables could affect the latter—weather conditions, density of burnable materials in target areas, and loss of blast and fallout effects of the weapon. Until such more definite information is available, there will be no basis to change current civil defense policy.

c. Attempts to encourage non-civil targeting options, discussed earlier, have a close bearing on our civil defense effort as well as that of the USSR. Increased emphasis on fallout protection would appear to be a logical corollary to development of non-civil targeting options, since fallout protection would be required to minimize collateral population casualties resulting from attacks against military forces. Otherwise, the potential advantages of targeting restraint would be lowered on both sides.

d. As now laid out, the US fallout shelter program will be substantially completed by 1967–68, provided the passage of the Shelter Incentives Legislation does not slip beyond the next session of Congress. Projected Soviet capabilities require that there be no slippage in the current schedule, and may in fact call for acceleration towards the end of the mid-range period. Further, if response from the public and all levels of government does not develop the number of shelter spaces required, consideration may be necessary for an increase in the federal share of the program.

e. In light of recent Congressional action which threatens the planned civil defense program, we would like to emphasize that our latest estimates of Soviet developments re-emphasize the importance of our planned civil defense program in saving lives in the event of war, and that this program is an integral part of our over-all national defense posture, which will be adversely affected if civil defense measures are allowed to fall by the wayside.

TABLE 1
SOVIET ICBM FORCES AT SELECTED PERIODS
Comparison of Estimates & Planning Assumptions

MID - 1963			MID - 1965					MID - 1967				
NIE 11-8-61 NIE 11-8-62			23 Sep 61 S/D Memo*			USIB	NIE 11-8-62	23 Sep 61 S/D Memo*			USIB	NIE 11-8-62
Launchers			OPT	MED	PESS	9 Nov 61		OPT	MED	PESS	9 Nov 61	
Soft	75-125	115-150	200	400	600	100-150	150-250	100	250	400	100-150	150-250
Semi-hard**	-	10-25***	-	-	-	125-250	100-175	-	-	-	200-400	125-250
Hard	-		200	350	500	Few	Few	400	750	1100	50-100	25-100
Total	75-125	125-175	400	750	1100	225-400	250-425	500	1000	1500	350-650	300-600

- * These figures represent a range of cases -- optimistic, median and pessimistic -- which were assumed in order to cover uncertainties in estimates of the Soviet ICBM threat. They were used in assessing the second-strike target destruction capabilities of the strategic forces recommended to you by the Secretary of Defense on 23 Sep 61.
- ** In USIB assumptions of 9 Nov 61, these were considered to be "dispersed, possibly semi-hard." In NIE 11-8-62, they are considered to have "some degree of hardening."
- *** These initial hardened sites may prove to be in the "hard" rather than "semi-hard" category. If so, the balance in later periods between the two categories may change.

DISSENTS TO NIE 11-8-62

Launchers	Army*	Air Force	Army	Air Force	Army	Air Force
Soft		155-210		250-300		250-300
Semi-hard		20-40		150-200		150-200
Hard		-		50		300
Total	100-125	175-250	200-275	450-550	250-425	700-800

* No breakdown made of soft and hard sites.

TABLE 2
Comparison of Missile SUB Estimates at Selected Periods

NIE 11-4-61 24 Aug 61					NIE 11-8-62*						
Nuclear	Mid-62	Cruise	Mid-66	Cruise	Nuclear	Mid-62	Cruise	Mid-66	Cruise	Mid-67	Cruise
	Ballistic subs/msls		Ballistic subs/msls			Ballistic subs/msls		Ballistic subs/msls		Ballistic subs/msls	
H (3 msl)	10/30	-	12/36	-	H (3 msl)	10/30	-	26/78	-	30/90	-
Adv (msl)	-	-	12/72	-	E (6 msl)	-	4/24	-	20/120	-	24/144
Total	10/30	-	24/108	-		10/30	4/24	26/78	20/120	30/90	24/144
Diesel					Diesel						
Z (2 msl)	6/12	-	6/12	-	Z (2 msl)	7/14	-	6/18	-	6/18	-
G (3 msl)	18/54	-	18/54	-	G (3 msl)	25/75	-	26/78	-	26/78	-
Total	24/66	-	24/66	-	W-con(2msl)	-	6/12	-	6/12	-	6/12
Grand Total	34/96	-	48/174	-		32/89	10/36	32/96	26/132	32/96	6/12

Ballistic-Cruise Recapitulation

- * In NIE 11-8-62, numerical estimates for 1966-67 are expressed as ranges and are given only for submarines rather than missiles. The numbers in this table are presented as reasonable illustrative figures consistent with the ranges given in the NIE.

	Mid-1962 subs/msls	Mid-1966 subs/msls	Mid-1967 subs/msls
Ballistic	42/119	58/174	62/186
Cruise	10/36	26/132	30/156
Grand Total	52/155	84/306	92/342